

Liquid Combustion Technology, LLC

EXECUTIVE ORDER U-U-063-0160-1 New Off-Road Small Spark-Ignition Engines at or Below 19 Kilowatts

Pursuant to the authority vested in California Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapters 1 and 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following engine and emission control systems produced by the manufacturer are certified for use in small off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY		DISPLACEMENT (cc)	ENGINE CLASS		FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)			
2018	JLCT	S.6912VX	691, 703	4-stroke, ≥	225 cc	Gasoline			
DURABILITY HOURS		EM	SPECIAL FEATURE		TYPICAL EQUIPMENT APPLICATION				
250		ECU, TBI			Walk-Behind Lawnmower, Riding Mower, Tractor, Generator Set, Commercial Turf				
ENGINE CODES/MODELS (rated power in kilowatt, kW)		See Attachment							
EGR=exhaus	t gas recirc	ulation AIR=sec	condary air injection PAIR=	pulsed AIR MFi=mu	Iti port fuel inject	varm-up TWC/OC O2S=oxygen sensor HO2S=heated O2S tion SFI=sequential MFI TBI=throttle body fuel injection x)=in series ECM=engine control module			

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx), carbon monoxide (CO), and particulate matter (PM) emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2403(b)), and certification

(PM) emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2403(b)), and certification emission levels for this engine family in grams per kilowatt-hour (g/kW-hr). Engines within this engine family shall have closed crankcases in conformance with Section 1054.115(a) of the "California Exhaust Emission Standards and Test Procedures for New 2013 and Later Small Off-Road Engines," adopted October 25, 2012.

 *=not applicable
 HC+NOx (g/kW-hr)
 CO (g/kW-hr)
 PM (g/kW-hr)

 STANDARD
 8.0
 549
 *

 FAMILY EMISSION LEVEL
 *
 *
 *

 CERTIFICATION LEVEL
 5.7
 231
 *

BE IT FURTHER RESOLVED: That the family emission level(s) (FELs), as applicable, is an emission limit declared by the manufacturer for use in the averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2403(e)(1) and 2407(a).

BE IT FURTHER RESOLVED: That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2404 (emission control labels) and 13 CCR Sections 2405 and 2406 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

This Executive Order hereby supersedes Executive Order U-W-063-0160 dated April 20, 2018.

Executed at El Monte, California on this ______ day of June 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Model Year:

2018

Manufacturer:

Llquid Combustion Technology, LLC

Engine Family:

JLCTS.6912VX

Issued:

Revised:

5/4/2018

E.O. Number: U-U-063-0160-1 910F1

Small Off-Road Engine Model Summary Form

Units for Table: kw

	47.	48.	49.	50.	51.	52.	53.	54.	55.	56.
/orst	Model	Sales	Displ	Bore/	Ignition	Max	Rated Speed	Rated	Torque Speed	l Emiss
ise?	Designation	Code	(cc)	Stroke	Timing	Power	(RPM)	Torque	(RPM)	Control Sys
Х	PLMHK-E1A 691	50-State	691	79/70	fixed	15.0	3600	39. 9N m	3600	ECU, TBI
	PLMHK-E1A 703	50-State	703	80/70	fixed	15.4	3600	41.0Nm	3600	ECU, TBI

